CONTENTS

Volume 36

Number 1, February 1990

A Ishizaki, K. Osajima, K. Nakamura, K. Kimura, T. Hara, and T. Ezaki: Biochemical characterization of *Lactococcus lactis* IO-1 whose optimal temperature is as high as 37°C ... 1
A. Oshima and T. Onoda: Acidification of intracellular pH results in neutral pH-sensitive growth of an alkalophilic *Bacillus* sp. ... 7
G. Krishnan and W. Altekar: Characterization of a halophilic glyceraldehyde-3-phosphate dehydrogenase from the archaebacterium *Haloarcula vallismortis* ... 19
T. Nakase, M. Itoh, A. Takematsu, and Robert J. Bandoni: *Bullera miyagiana*, a new species of ballistospore-forming yeast isolated from *Abies firma* collected in Japan ... 33
K. Nakamura, K. Fukuda, and Y. Amano: Long-term stabilization of sulfite oxidation in whole cells of *Thiobacillus thiooxidans* S3 ... 41

Short Communication

S. K. Chakrabarti, A. K. Halder, and P. K. Chakrabartty: Relatedness among *Rhizobium* species ... 47
T. Ino and Y. Nishimura: Radiation sensitivity of *Acinetobacter* species ... 55
A. K. Roy and H. K. Chourasia: Inhibition of aflatoxins production by microbial interaction ... 59
Y. Yamada and Y. Nakagawa: The molecular phylogeny of the basidiomycetous yeast species, *Leucosporidium scottii* based on the partial sequences of 18S and 26S ribosomal ribonucleic acids ... 63

Number 2, April 1990

Y. Magae, K. Haga, H. Taniguchi, and T. Sasaki: Enzymes of strains of *Pleurotus* species (Basidiomycetes) compared by electrophoresis ... 69
A. K. Halder, A. K. Mishra, P. Bhattacharyya, and P. K. Chakrabartty: Solubilization of rock phosphate by *Rhizobium* and *Bradyrhizobuim* ... 81
G. D. Ferroni and K. N. Boadi: Physiology of exopolymer production by a psychrotrophic bacterium ... 93
Y. S. Park and K. Toda: Effect of tricarboxylic acid cycle intermediates on acetic acid production by *Acetobacter aceti* ... 105
P.-X. Yao and K. Toda: Lactic acid production in electrodialysis culture ... 111
T. Ishikawa and Y. Yamada: Purification of restriction endonuclease from *Acetobacter pasteurianus* IFO 13752 (*Apa*ORI) and its properties ... 127

Short Communication

S. Yamagata, A. Paszewski, and I. Lewandowska: Purification and properties of *O*-acetyl-L-homoserine sulfhydrylase from *Aspergillus nidulans* ... 137

Number 3, June 1990

Thi Minh Chau Ly and H. Müller: Interactions of *Listeria monocytogenes*, *Listeria seeligeri*, and *Listeria innocua* with protozoans ... 143

CONTENTS

Volume 36

Number 1, February 1990

A Ishizaki, K. Osajima, K. Nakamura, K. Kimura, T. Hara, and T. Ezaki: Biochemical characterization of *Lactococcus lactis* IO-1 whose optimal temperature is as high as 37°C ... 1
A. Oshima and T. Onoda: Acidification of intracellular pH results in neutral pH-sensitive growth of an alkalophilic *Bacillus* sp. ... 7
G. Krishnan and W. Altekar: Characterization of a halophilic glyceraldehyde-3-phosphate dehydrogenase from the archaebacterium *Haloarcula vallismortis* ... 19
T. Nakase, M. Itoh, A. Takematsu, and Robert J. Bandoni: *Bullera miyagiana*, a new species of ballistospore-forming yeast isolated from *Abies firma* collected in Japan ... 33
K. Nakamura, K. Fukuda, and Y. Amano: Long-term stabilization of sulfite oxidation in whole cells of *Thiobacillus thiooxidans* S3 ... 41

Short Communication

S. K. Chakrabarti, A. K. Halder, and P. K. Chakrabartty: Relatedness among *Rhizobium* species ... 47
T. Ino and Y. Nishimura: Radiation sensitivity of *Acinetobacter* species ... 55
A. K. Roy and H. K. Chourasia: Inhibition of aflatoxins production by microbial interaction ... 59
Y. Yamada and Y. Nakagawa: The molecular phylogeny of the basidiomycetous yeast species, *Leucosporidium scottii* based on the partial sequences of 18S and 26S ribosomal ribonucleic acids ... 63

Number 2, April 1990

Y. Magae, K. Haga, H. Taniguchi, and T. Sasaki: Enzymes of strains of *Pleurotus* species (Basidiomycetes) compared by electrophoresis ... 69
A. K. Halder, A. K. Mishra, P. Bhattacharyya, and P. K. Chakrabartty: Solubilization of rock phosphate by *Rhizobium* and *Bradyrhizobuim* ... 81
G. D. Ferroni and K. N. Boadi: Physiology of exopolymer production by a psychrotrophic bacterium ... 93
Y. S. Park and K. Toda: Effect of tricarboxylic acid cycle intermediates on acetic acid production by *Acetobacter aceti* ... 105
P.-X. Yao and K. Toda: Lactic acid production in electrodialysis culture ... 111
T. Ishikawa and Y. Yamada: Purification of restriction endonuclease from *Acetobacter pasteurianus* IFO 13752 (*Apa*ORI) and its properties ... 127

Short Communication

S. Yamagata, A. Paszewski, and I. Lewandowska: Purification and properties of *O*-acetyl-L-homoserine sulfhydrylase from *Aspergillus nidulans* ... 137

Number 3, June 1990

Thi Minh Chau Ly and H. Müller: Interactions of *Listeria monocytogenes*, *Listeria seeligeri*, and *Listeria innocua* with protozoans ... 143

R. Montrocher, G. Billon-Grand, and M. Claisse: Analysis of cytochromes and co-enzymes Q in the yeast genus *Candida* 151
F. Ishino, Y. Ito, S. Ueno, S. Tamaki, and M. Matsuhashi: Mutation causing overproduction of the short peptide component gamma of penicillin-binding protein 1Bs of *Escherichia coli* 163
M. Ohmori and K. Ohmori: Ammonium-nitrogen partitioning under different balances of nitrogen and carbon in the cyanobacterium *Anabaena cylindrica* 171
M. Ikeda, M. Wachi, H. K. Jung, F. Ishino, and M. Matsuhashi: Homology among MurC, MurD, MurE and MurF proteins in *Escherichia coli* and that between *E. coli* MurG and a possible MurG protein in *Bacillus subtilis* 179
S. Kume and Y. Fujio: Digestion of municipal sewage sludge by a mixture of thermophilic bacilli and their culture extract 189

Short Communication
M. Takeuchi, A. Yokota, S. Mizuno, I. Yano, and M. Tsukamura: Taxonomy of "*Protaminobacter alboflavus*": Reclassification as *Mycobacterium diernholferi* 195
H. Ohtake, E. Fujii, and K. Toda: A survey of effective electron donors for reduction of toxic hexavalent chromium by *Enterobacter cloacae* (strain HO1) 203
T. Nakase, A. Takematsu, M. Itoh, and T. Boekhout: Conspecificity of *Bullera derxii*, *Bullera sinensis* and *Bullera alba* var. *lactis* 209

Number 4, August 1990

J. Courtois, P. Pheulpin, A. Heyraud, and B. Courtois: Production and characterization of *Rhizobium meliloti* M5N1 water soluble exopolysaccharides using high performance liquid chromatography 215
Y. S. Park and K. Toda: Simulation study on bleed effect in cell-recycle culture of *Acetobacter aceti* 221
K. Miyake and S. Hino: Effect of metal ions on the anaerobic synthesis of superoxide dismutase in *Escherichia coli* 235
A. Singh, A. K. Agrawal, A. B. Abidi, and N. S. Darmwal: Properties of exoglucanase from *Aspergillus niger* 245
M. Takeuchi, A. Yokota, and A. Misaki: Comparative structures of the cell-wall polysaccharides of four species of the genus *Microbacterium* 255

Short Communication
H. Sato and Y. Yamada: The restriction endonuclease *Aat*I from *Acetobacter aceti* IFO 3281, an isoschizomer of *Stu*I, has a dimeric structure 273
K. Toda, Pei-xin Yao, and H. Ohtake: Application of multi-stage continuous culture for estimating net rate of plasmid transfer 279
N. Wakao, J. Konno, Y. Sakurai, and H. Shiota: Survival of freeze-dried *Thiobacillus ferrooxidans* NCIB 8455 after long-term storage 283
S. Inamoto, T. Abo, and E. Ohtsubo: Binding sites of integration host factor in *oriT* of plasmid R100 287

Number 5, October 1990

A. K. Roy and H. K. Chourasia: Mycoflora, mycotoxin producibility and mycotoxins in traditional herbal drugs from India 295

P. Prasad and A. K. Kashyap: Ammonium transport in thermophilic cyanobacterium *Synechococcus elongatus* 303
P. Kämpfer, W. Dott, and R. M. Kroppenstedt: Numerical classification and identification of some nocardioform bacteria 309
Ronald G. Labbé, Hsiao-Ping Lu, and Shirley Tang: Extraction, purification and characterization of a peptidoglycan hydrolase from vegetative cells of *Clostridum perfringens* type A 333

Short Communication

G. D. Ferroni and K. N. Boadi: Stimulation of exopolymer production in a psychrotrophic bacterium by cell-free extracts of the bacterium 345
P. Valenti, M. Polidoro, V. Buonfiglio, P. Visca, and N. Orsi: Plasmid DNA profiles in *Thiobacillus ferrooxidans* 351
I. Yamamoto, N. Yamazaki, M. Hohmura, and M. Ishimoto: Effect of the *tor* mutation in *Escherichia coli* on the trimethylanime *N*-oxide, nitrate and dimethylsulfoxidee reductases, the formate dehydrogenases N and H and nitrate repression 357
Seung-Ku Yoo, Dan K. Braithwaite, and J. Ito: Head fiber protein gene of bacteriophage Nf 365

Number 6, December 1990

K. Nakamura, H. Miki, and Y. Amano: Cell growth and accumulation of *Thiobacillus thiooxidans* S3 in a pH-controlled thiosulfate medium 369
H. Ueno, K. Miyashita, Y. Sawada, and Y. Oba: Purification and some properties of extracellular chitinases from *Streptomyces* sp. S-84 377
T. Suzuki, S. Yamanaka, and Y. Nishimura: Chemotaxonomic study of *Xenorhabdus* species—Cellular fatty acids, ubiquinone and DNA-DNA hybridization 393
Y. Yamada, T. Nagahama, H. Kawasaki, and I. Banno: The phylogenetic relationship of the genera *Phaffia* Miller, Yoneyama et Soneda and *Cryptococcus* Kützing emend. Phaff et Spencer (Cryptococcaceae) based on the partial sequences of 18S and 26S ribosomal ribonucleic acids 403
F. Jin, X. Cheng, Y. Shi, and C. Zhang: Isolation of new thermophilic aerobic bacteria which produce thermostable α-amylase 415
Y. Yamada and C. Nogawa: The molecular phylogeny of the Ascomycetous anamorphic yeast genus *Arxula* van der Walt, Smith et Yamada based on the partial sequences of 18S and 26S ribosomal ribonucleic acids 425
Y. Yamada, Y. Nakagawa, and I. Banno: The molecular phylogeny of the Q_{10}-equipped species of the heterobasidiomycetous yeast genus *Rhodosporidium* Banno based on the partial sequences of 18S and 26S ribosomal ribonucleic acids 435

Short Communication

W.-L. Chao and C.-L. Tai: Influence of cations and anions on the survival of *Vibrio parahaemolyticus* in freshwater 445
C. Tsukamoto, Y. Magae, H. Taniguchi, and T. Sasaki: Changes in the number of nuclei during formation of giant protoplasts in *Pleurotus cornucopiae* 451